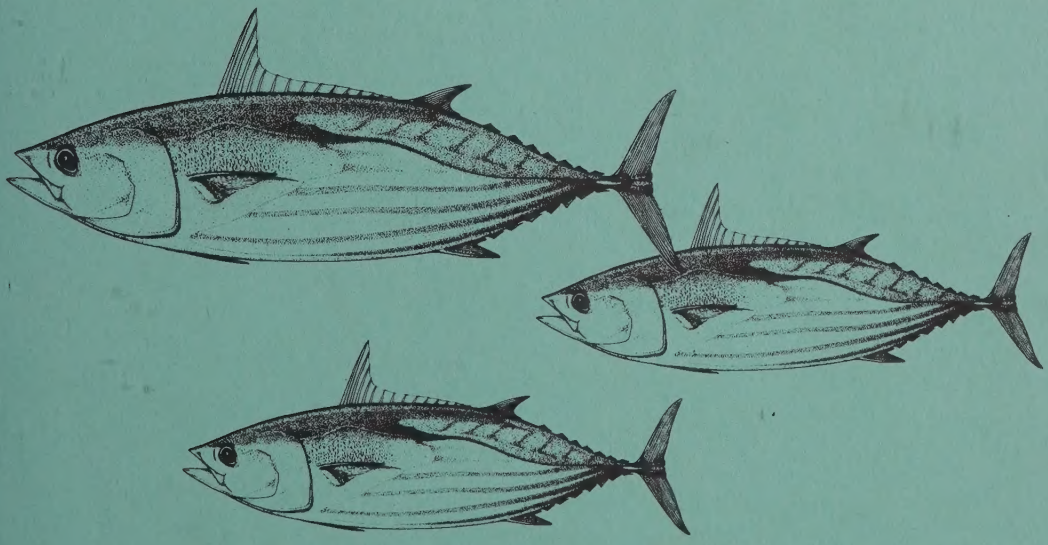
SEPTEMBER 1975
No. 9

FISHING INFORMATION

Southwest Fisheries Center-La Jolla, California



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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
SOUTHWEST FISHERIES CENTER
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FISHING INFORMATION

SEPTEMBER 1975, No. 9

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PREFACE

This publication, Fishing Information, appears monthly and contains 1) fishery advisory information, 2) a narrative description of pertinent surface temperature conditions, 3) charts of winds and pressures for the eastern North Pacific, 4) charts of sea surface temperature for the North Pacific and eastern tropical Pacific, and 5) charts of subsurface temperature structure in the eastern North Pacific.

A supplement to Fishing Information appears at 15-day intervals throughout the year. This is a chart of sea surface temperature (contoured at 2°F (1°C) intervals) from Baja California to Vancouver Island out to about 135°W. Special bulletins are published in conjunction with the 15-day sea surface temperature charts which include short-term projections of albacore distribution and locations of productive fishing areas, information on oceanographic and atmospheric conditions, and other information as is appropriate during the albacore fishing season.

The Secretary of Commerce has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Department. Use of funds for printing this publication approved by the Office of Management and Budget, August 20, 1973; this approval expires June 1976.

Submitted for publication - October 23, 1975

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ENVIRONMENTAL CHARTS ANALYZED BY:

F. Miller (Figures 8 and 9)
J. Renner (Figures 1, 2, 3, 4, 5, 6, 7, 10, 11 and 15-day Supplement)

TECHNICAL EDITOR:
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Fisheries Research Board of Canada, Pacific Environment Institute, West Vancouver, British Columbia, by L.F. Giovando from observations by T. Carr at Langara Island Light; D.M. Short and Cape St. James Light; L. Collins at Kains Island Lightstation; I.G. McNeil at Amphitrite Point Light
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Fishing Vessels, *Aquarius*,*Captain Joe Medina, Christina C., Conquest, Elsinore, Gina Ann, Lucky Strike, Margaret L., Marietta, Mary Barbara, Pan Pacific, Polaris, Queen Mary, San Juan (WX8016) Santa Rosa, Sea Quest, Sea Treasure, Venturous, Westport.*

Expendable bathythermograph and salinity observations are made by the mates and engineers of the *Californian* and *Hawaiian Queen* of Matson Navigation Co. The data are processed under supervision of D.R. McLain at the NMFS Pacific Environmental Group, Monterey, using computer facilities of the Fleet Numerical Weather Center. The project is partially supported by the National Science Foundation and the Office of Naval Research under Government NAonr-9-74.

Sea Surface Temperature and Environmental Conditions

Eastern North Pacific

Sea surface temperature changes between August and September are usually small in the eastern North Pacific as seasonal cooling begins. However, during September 1975 temperatures rose slightly from values during August, with small decreases confined to a band between 30°N and 40°N and in coastal regions between Vancouver Island and northern Baja California.

The sea surface temperature anomaly pattern for September was similar to that of August with a large area of 1 to 3°F (0.6 to 1.7°C) above-normal temperatures in the central eastern North Pacific; 1 to 3°F (0.6 to 1.7°C) below-normal temperatures occur between 30°N and the Aleutian Islands, in the Gulf of Alaska, along the western coast of North America, and in a large area extending westward from Baja California to the Hawaiian Islands. The central region of above-normal temperatures spread northward towards the Gulf of Alaska, while below-normal temperatures increased slightly in the Gulf of Alaska and offshore the U.S. west coast.

Sea level pressures were 1 to 6 millibars above normal over most of the eastern North Pacific during September, resulting in a strong high pressure cell centered near 40°N and 140°W with a ridge of high pressure extending over western Canada and the Pacific Northwest. Strong north-to-northwesterly winds along the U.S. west coast caused continued upwelling and cold water temperatures from Cape Flattery south to Baja California.

Western North Pacific

Sea surface temperatures increased markedly during September in the western North Pacific, and many areas that had below-normal temperatures during August show above-normal values in September. The large area of relatively cool water in the central portion of the western North Pacific decreased in intensity and size, and temperatures that were 2 to 5°F (1.1 to 2.8°C) below-normal during August changed to 1 to 3°F (0.6 to 1.7°C) below-normal during September. Warming also occurred east of Honshu where temperatures that were 1 to 3°F (0.6 to 1.7°C) below-normal increased to 1 to 3°F (0.6 to 1.7°C) above-normal values.

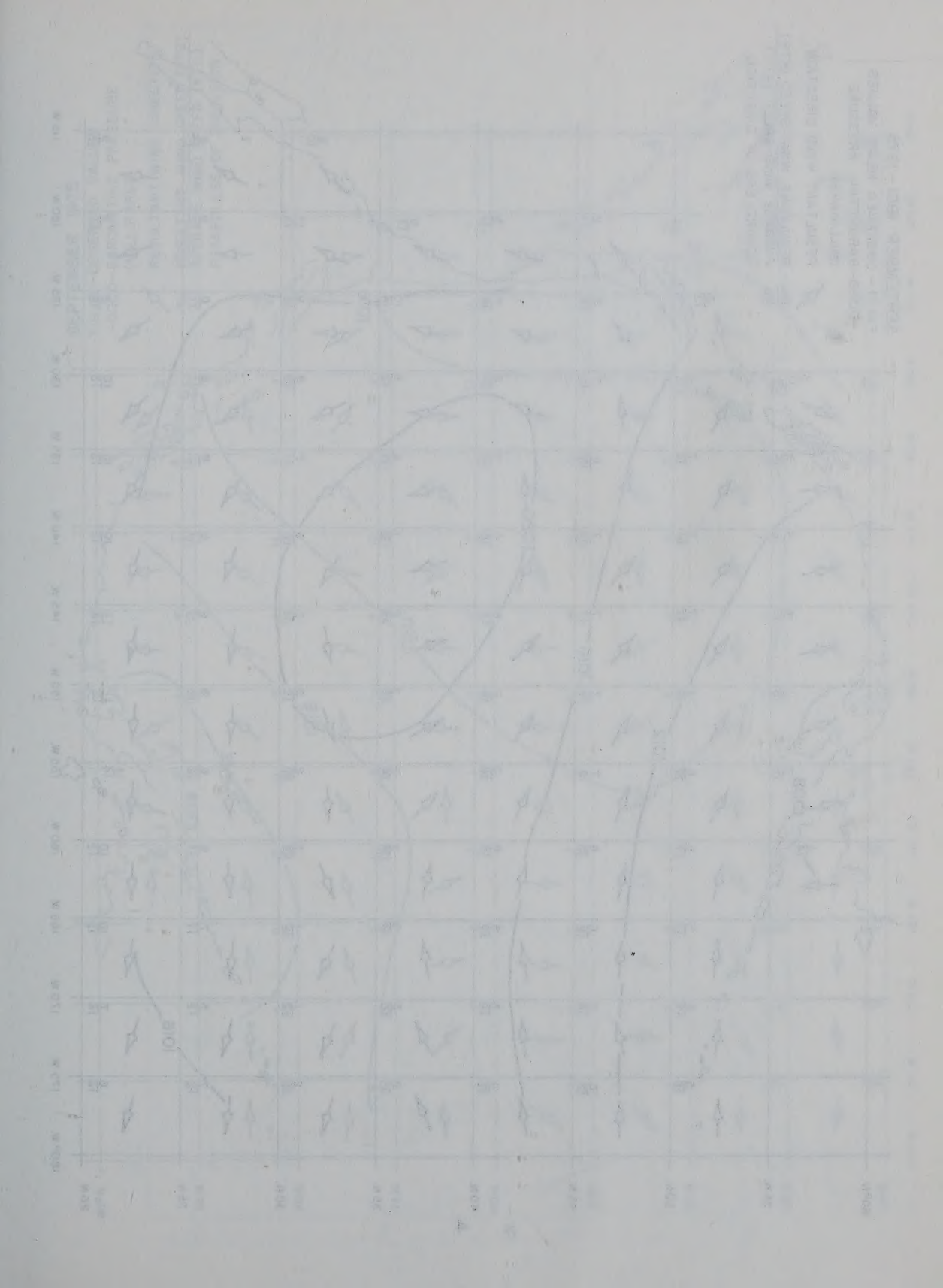
The region of above-normal temperatures that lies between 150°E and 170°E and extends northward from 35°N to the Kuril Islands and the Kamchatka Peninsula increased in size and intensity during September, with temperatures warming to 3 to 5°F (1.7 to 2.8°C) above-normal values.

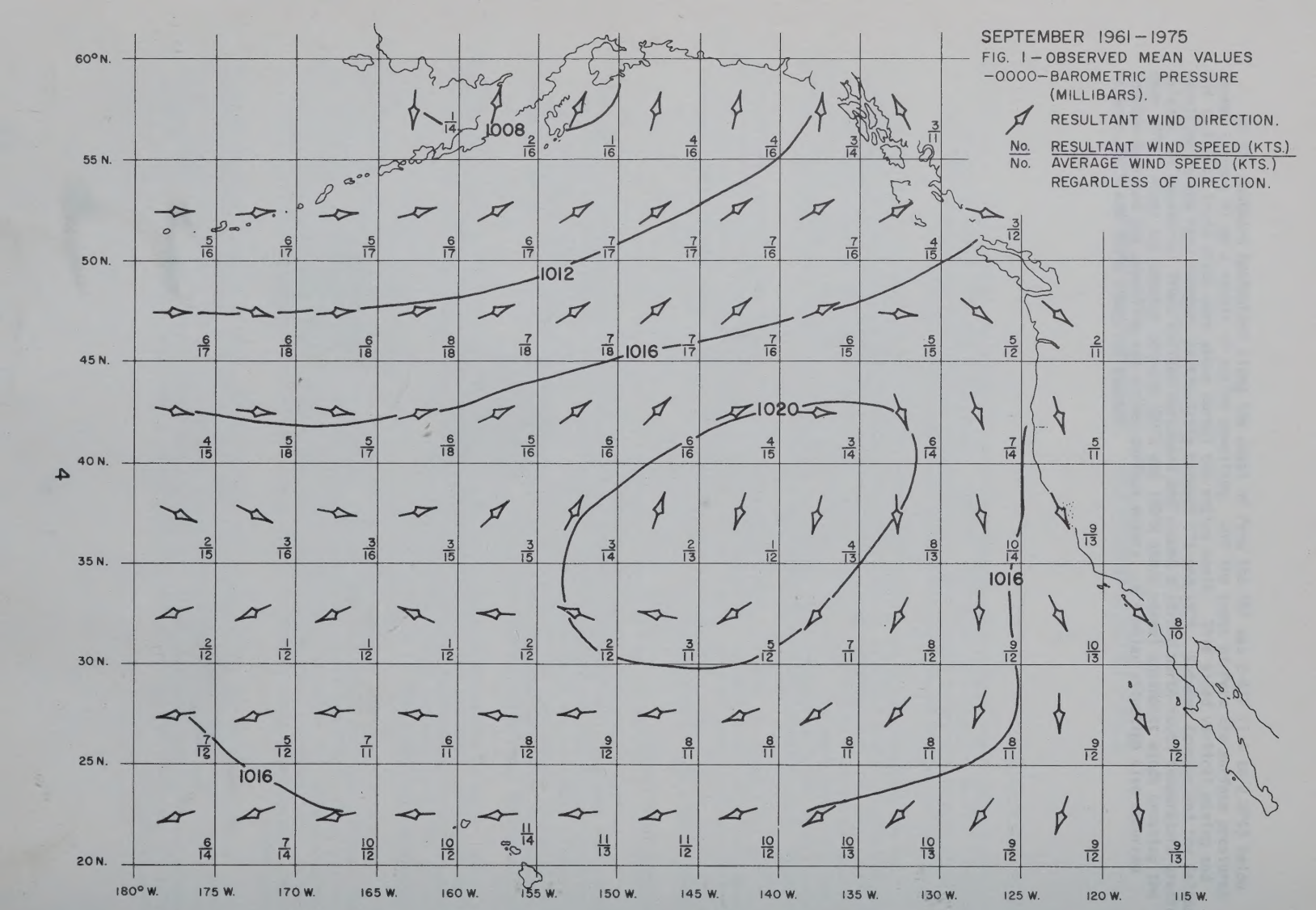
Eastern Tropical Pacific

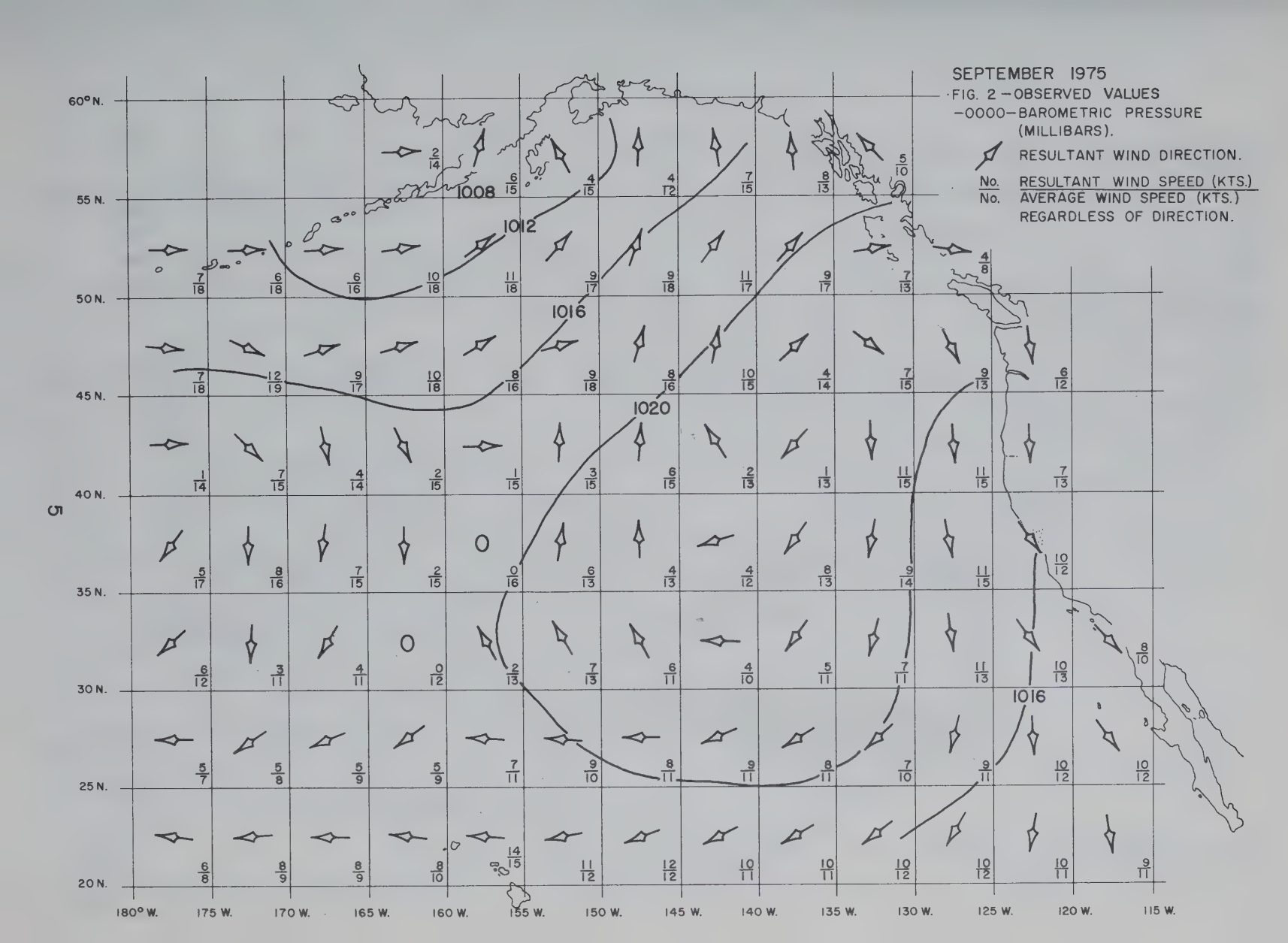
Between 30°N and 30°S seasonal (August to September) changes in sea surface temperatures (SST) are normally less than 1°F (0.6°C) over most of the eastern tropical Pacific. The SST in the Peru Current north of 30°S and along the equator approach minimum values in September. Frequently the largest negative SST anomalies occur along the equator as a result of active upwelling during this season. The equatorial ocean front between the coast of Ecuador and the Galápagos Islands normally shows a strong north-south temperature gradient which marks the northern boundary of surface upwelling.

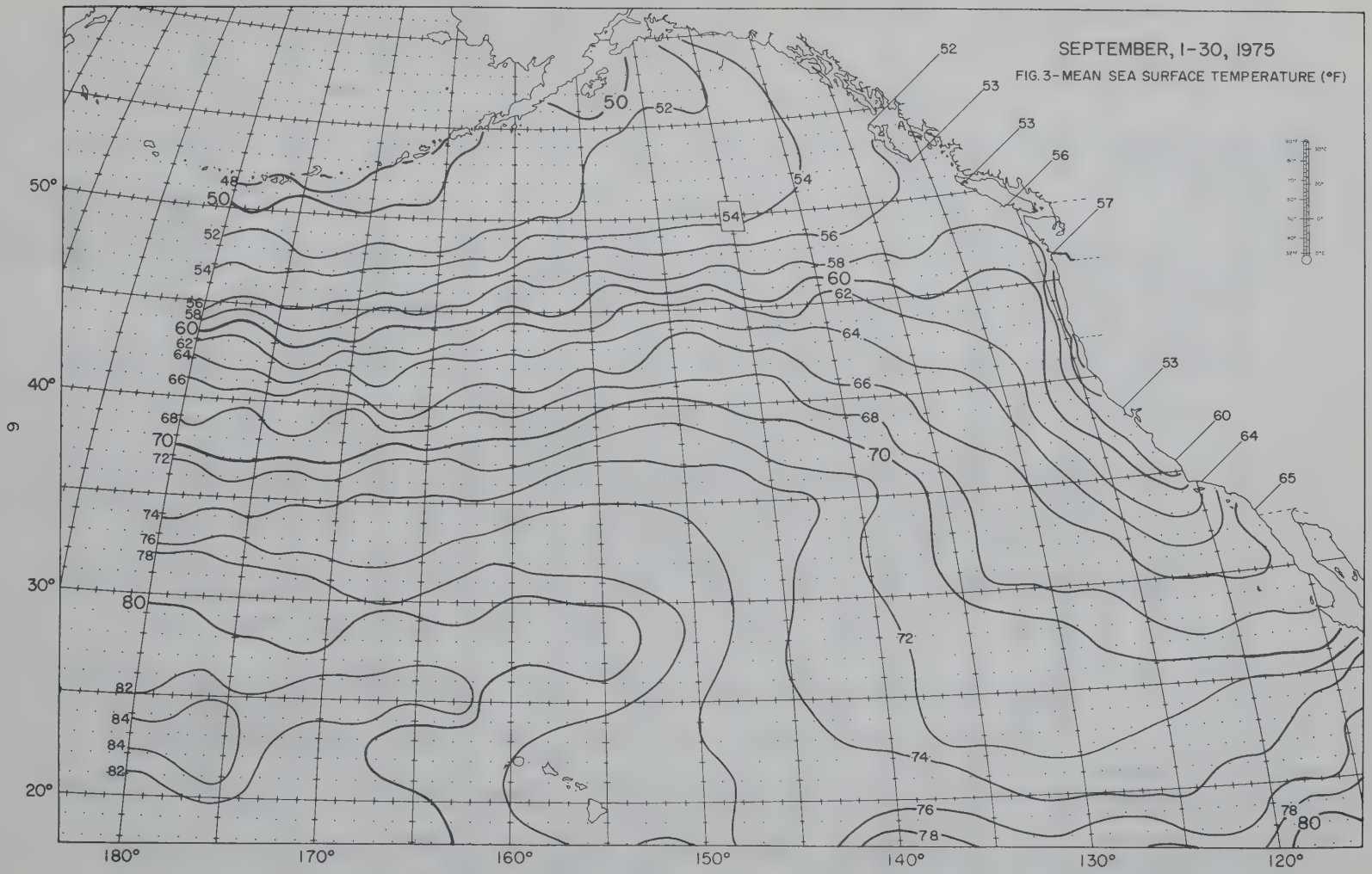
In September 1975 the SST (Figure 8) was near normal over most of the eastern tropical Pacific. Three areas experienced greater than normal cooling and resulted in negative anomalies greater than 2°F (1.1°C). One area of significant cooling was southwest of the tip of Baja California (Figure 9). During September four tropical storms (one became a hurricane) formed between 15°N and 20°N east of 110°W and moved through the fishing grounds leaving a persistent trail of cool water south of Baja California.

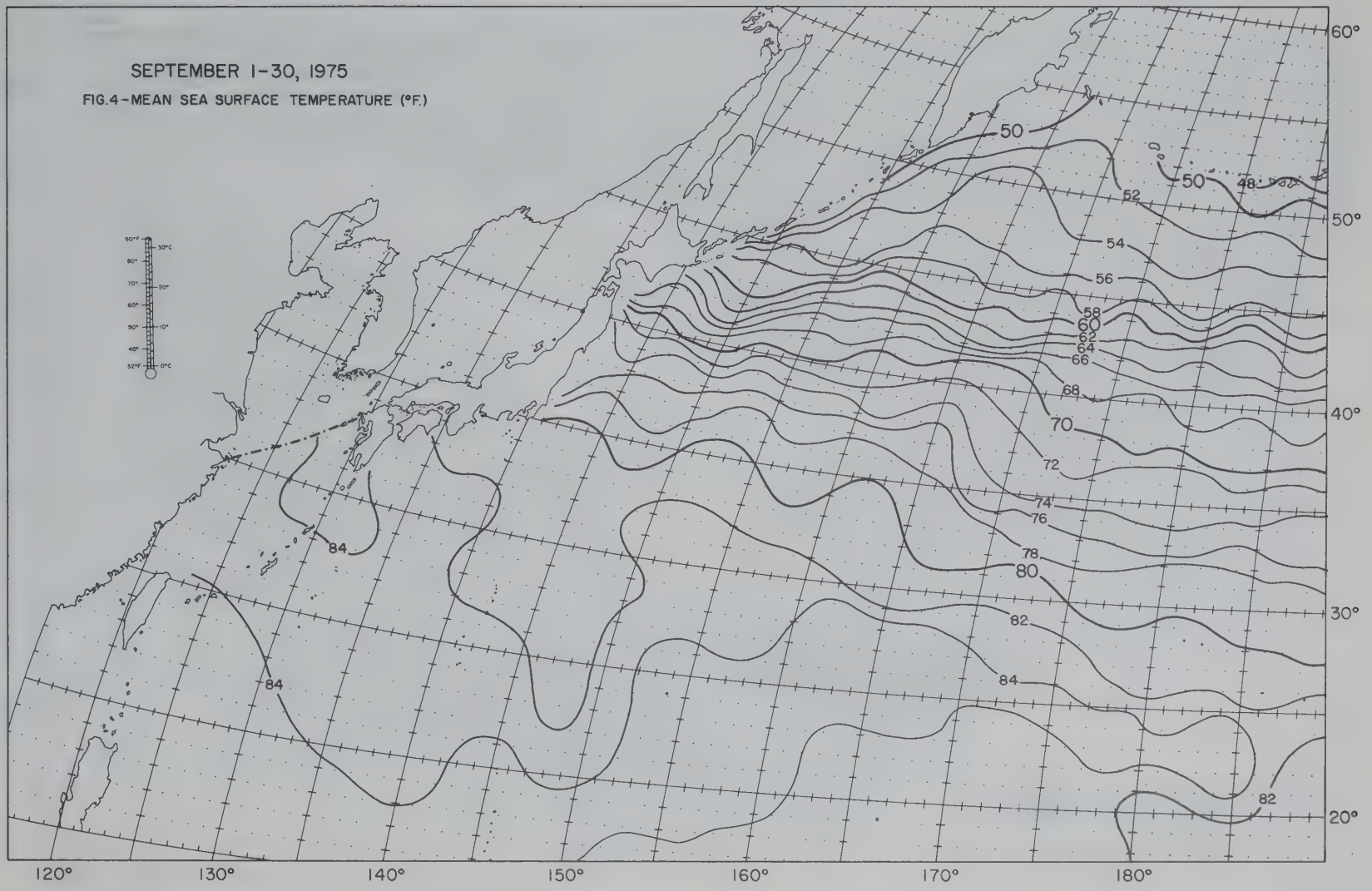
In the southern hemisphere along the coast of Peru the SST was 2-4°F (1.1 to 2.2°C) below normal (Figure 9) as a result of active upwelling. Off the coast of Peru the surface pressures and southeast trade winds were above normal the entire month. This aided vertical mixing and upwelling in the Peru Current, particularly between 5°S and 15°S. Between Ecuador and the Galápagos Islands the equatorial front shifted northward and showed a strong north-south temperature gradient near 90°W. Along the equator between 120°W and 130°W above normal southeast winds crossing the equator enhanced the upwelling and cooled surface waters. A similar situation also occurred between 150°W and 165°W along the equator.

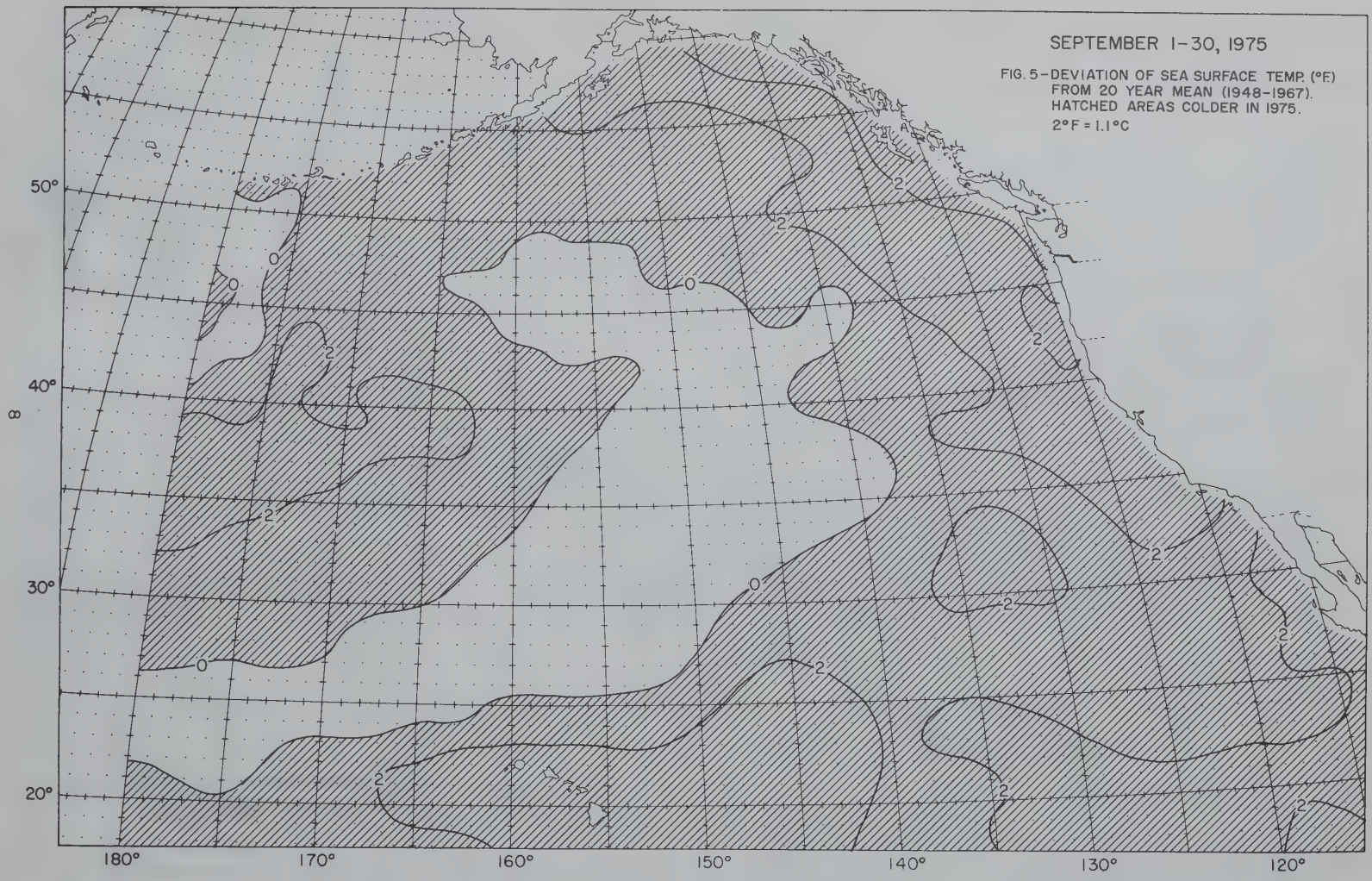


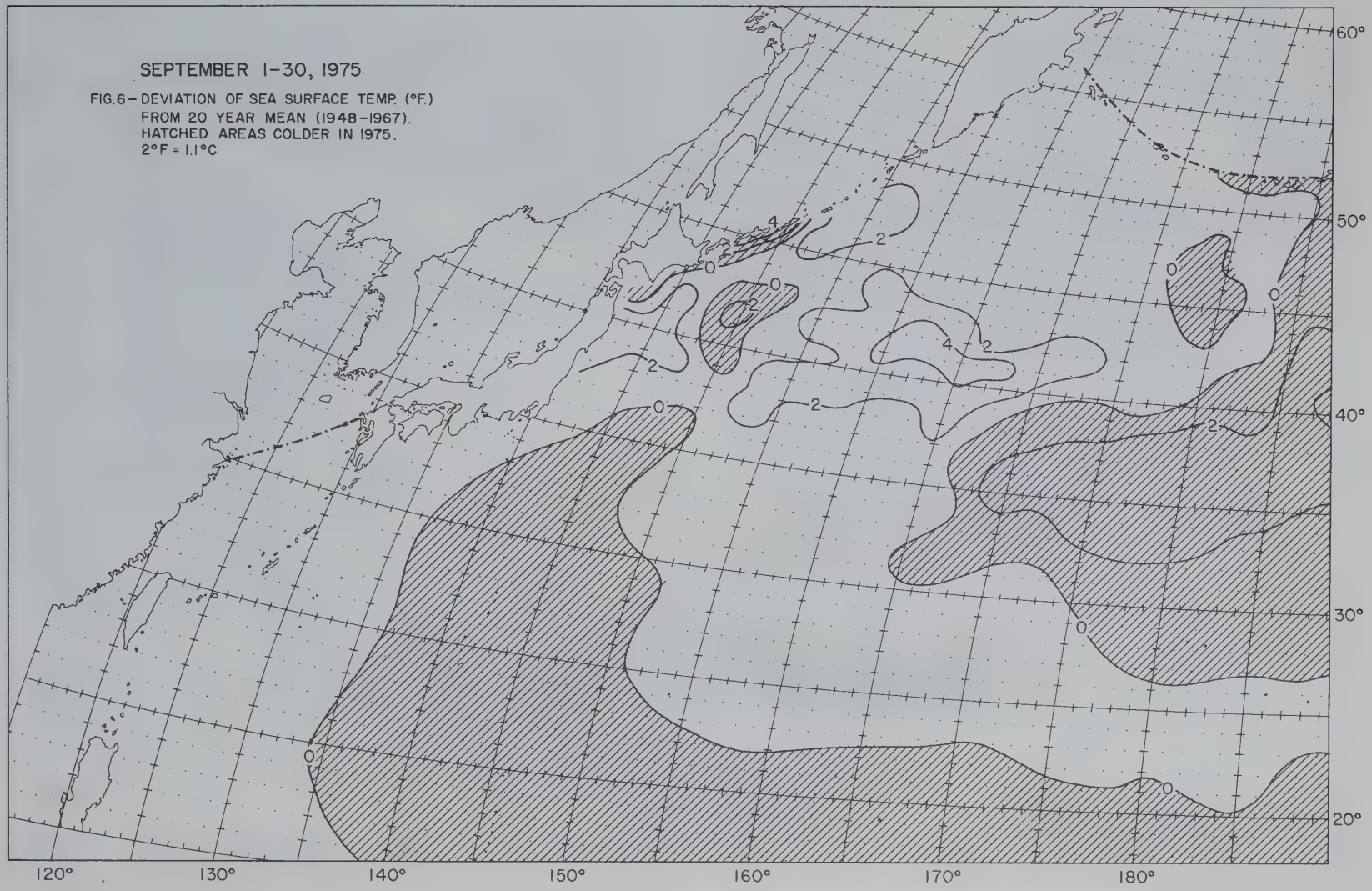

SEPTEMBER 1961 – 1975
FIG. 1 – OBSERVED MEAN VALUES
–0000– BAROMETRIC PRESSURE (MILLIBARS).
RESULTANT WIND DIRECTION.
No. RESULTANT WIND SPEED (KTS.)
No. AVERAGE WIND SPEED (KTS.) REGARDLESS OF DIRECTION.
1008
1012
1016
1020
1016
1016
60° N.
55 N.
50 N.
45 N.
40 N.
35 N.
30 N.
25 N.
20 N.
180° W.
175 W.
170 W.
165 W.
160 W.
155 W.
150 W.
145 W.
140 W.
135 W.
130 W.
125 W.
120 W.
115 W.

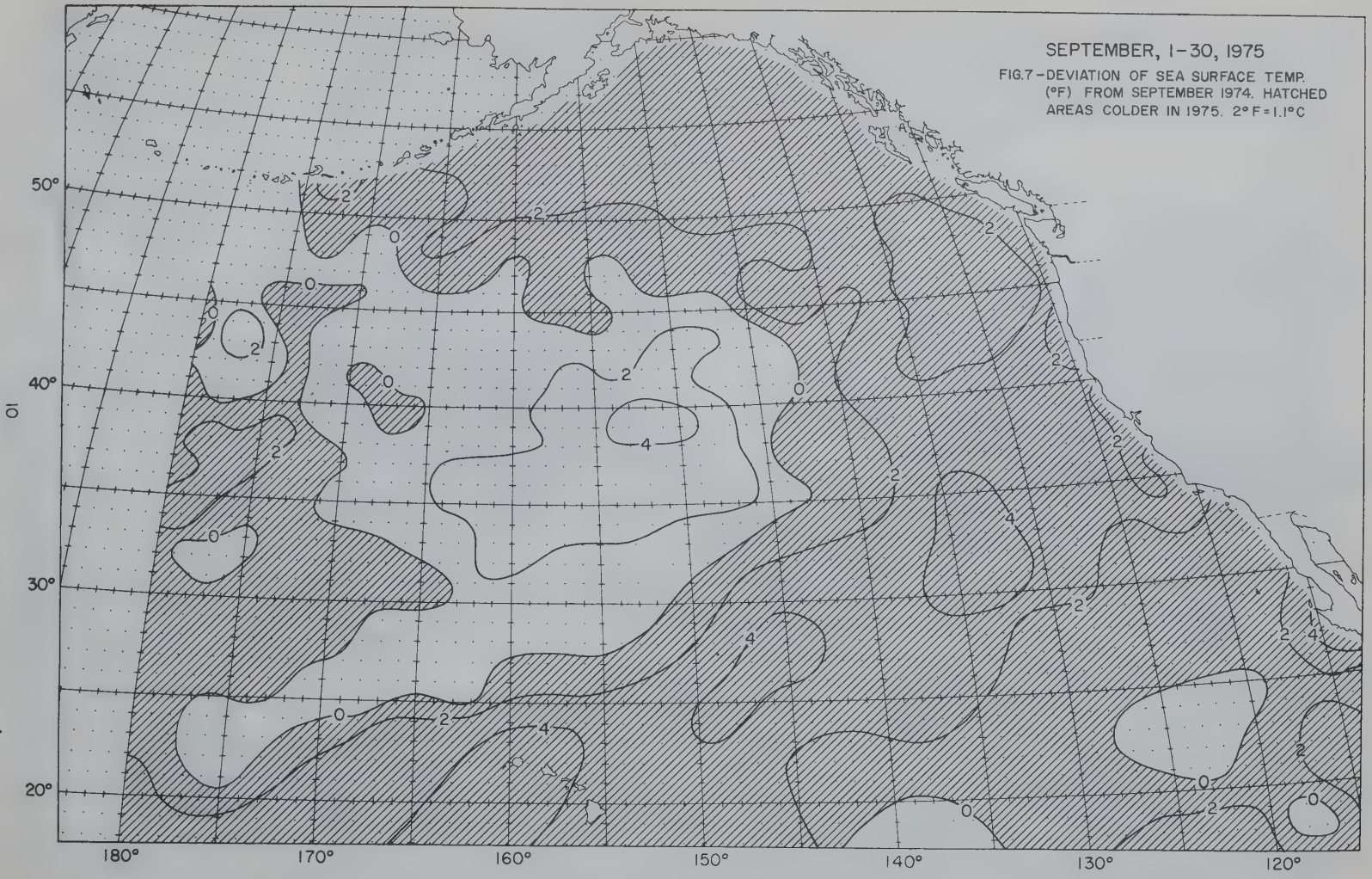

SEPTEMBER 1975
FIG. 2 – OBSERVED VALUES
–0000– BAROMETRIC PRESSURE (MILLIBARS).
RESULTANT WIND DIRECTION.
No. RESULTANT WIND SPEED (KTS.)
No. AVERAGE WIND SPEED (KTS.) REGARDLESS OF DIRECTION.
1008
1012
1016
1020
1016
60° N.
55 N.
50 N.
45 N.
40 N.
35 N.
30 N.
25 N.
20 N.
180° W.
175 W.
170 W.
165 W.
160 W.
155 W.
150 W.
145 W.
140 W.
135 W.
130 W.
125 W.
120 W.
115 W.

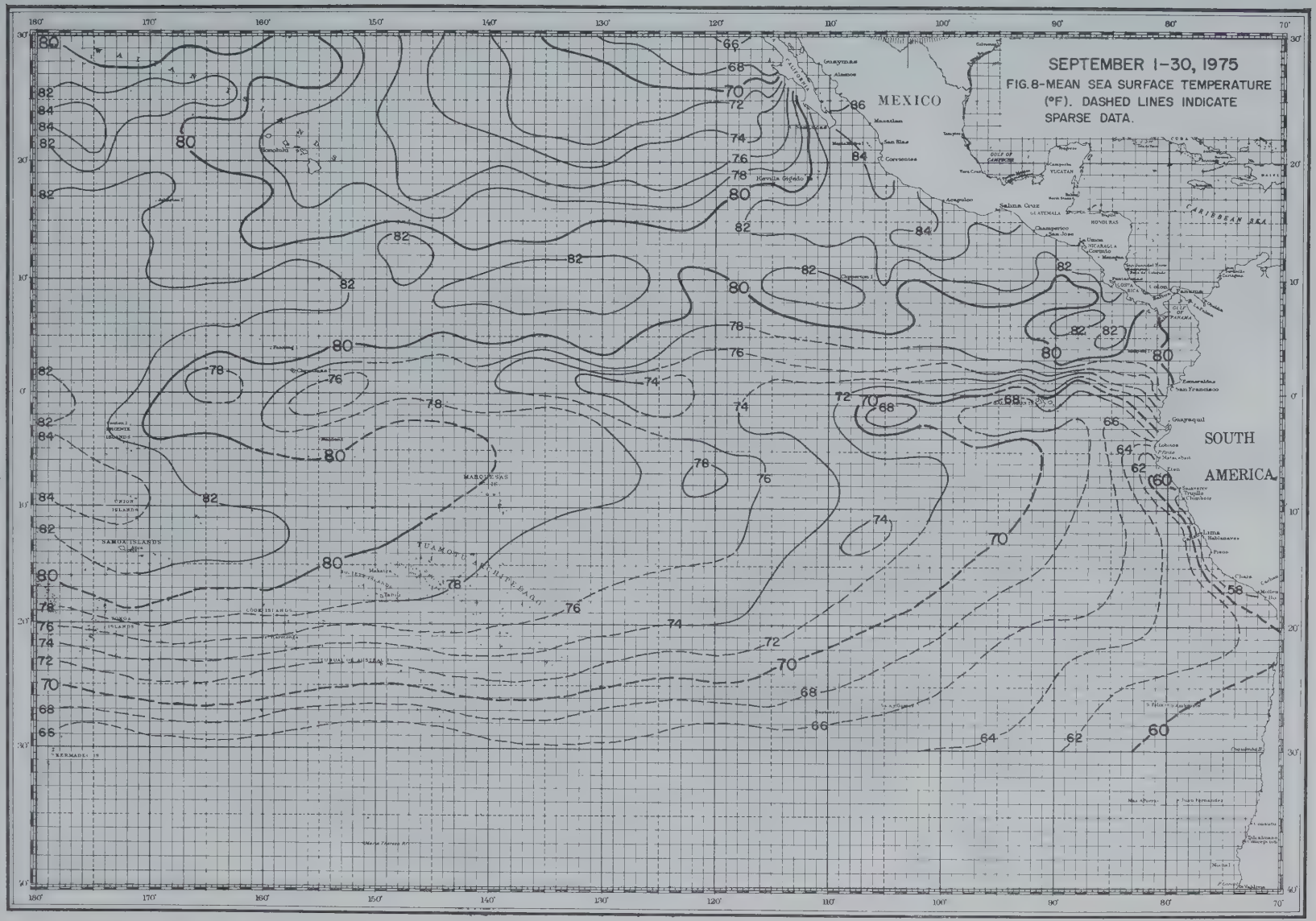

SEPTEMBER, 1-30, 1975
FIG. 3-MEAN SEA SURFACE TEMPERATURE (°F)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
9


SEPTEMBER 1-30, 1975
FIG.4-MEAN SEA SURFACE TEMPERATURE (°F.)
50
50
48
52
54
56
58
60
62
64
66
68
70
72
74
76
78
80
82
84
84
84
82
60°
50°
40°
30°
20°
120°
130°
140°
150°
160°
170°
180°


SEPTEMBER 1-30, 1975
FIG. 5-DEVIATION OF SEA SURFACE TEMP. (°F) FROM 20 YEAR MEAN (1948-1967). HATCHED AREAS COLDER IN 1975.
2°F = 1.1°C
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
0
2


SEPTEMBER 1-30, 1975
FIG.6 – DEVIATION OF SEA SURFACE TEMP. (°F.)
FROM 20 YEAR MEAN (1948-1967).
HATCHED AREAS COLDER IN 1975.
2°F = 1.1°C
60°
50°
40°
30°
20°
120°
130°
140°
150°
160°
170°
180°
4
2
0
2
4
2
2
0
0
0
2
0
0
0
0


SEPTEMBER, 1-30, 1975
FIG.7-DEVIATION OF SEA SURFACE TEMP. (°F) FROM SEPTEMBER 1974. HATCHED AREAS COLDER IN 1975. 2° F = 1.1° C
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
01


SEPTEMBER 1-30, 1975
FIG.8-MEAN SEA SURFACE TEMPERATURE (°F). DASHED LINES INDICATE SPARSE DATA.
MEXICO
SOUTH AMERICA
HAWAIIAN ISLANDS
MARQUESAS ISLANDS
SAMOA ISLANDS
TUAMOTU ARCHIPELAGO
CARIBBEAN SEA
GULF OF MEXICO
GULF OF PANAMA
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
PANAMA
Acapulco
Salina Cruz
Guayaquil
Lima
Callao
Chimbote
Mazatlan
San Blas
Corrientes
Manzanillo
Champerico
San Jose
Corinto
Balboa
Cristobal
Esmeraldas
San Francisco
Tumaco
Buenaventura
Pisco
Iquique
Arica
Antofagasta
Valparaiso
Talcahuano
Juan Fernandez
Easter I.
Pitcairn I.
Tahiti
Raiatea
Rarotonga
Samoa Islands
Cook Islands
Tubuai Islands
Bermuda
Galapagos Is.
Cocos I.
Clipperton I.
Revilla Gigedo Is.
Socorro I.
Malpelo I.
Gorgona I.
Gallo I.
Malpelo I.
Tres Marias Is.
Tres Marias Is.
Tres Marias Is

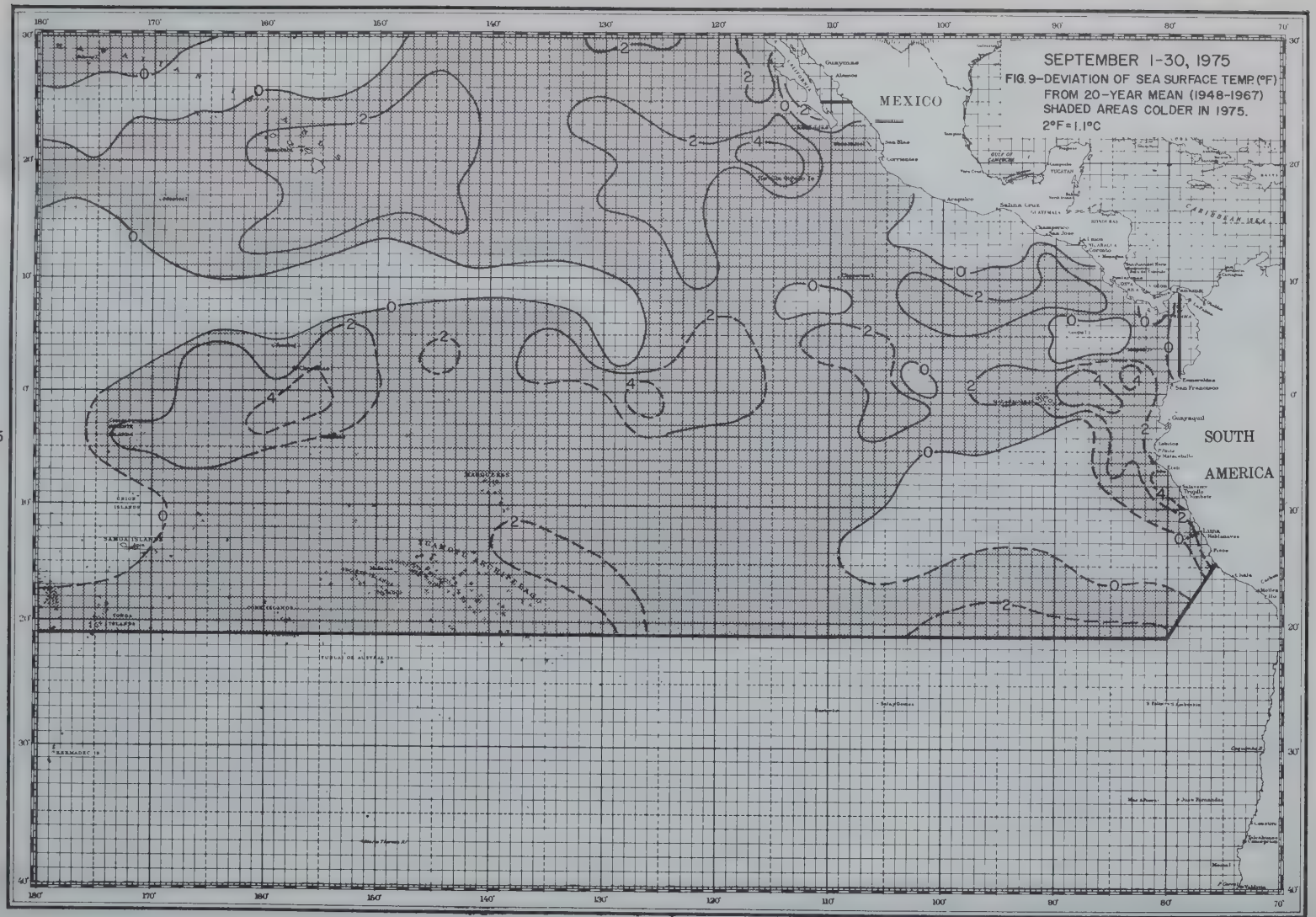
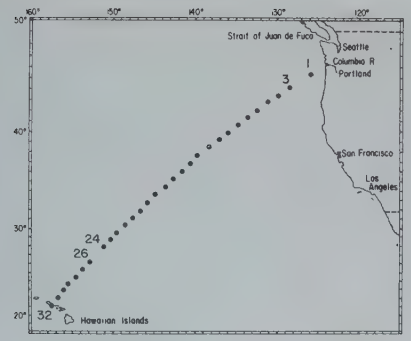
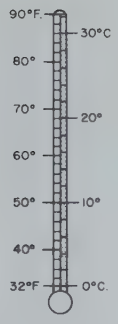

SEPTEMBER 1-30, 1975
FIG. 9-DEVIATION OF SEA SURFACE TEMP. (°F)
FROM 20-YEAR MEAN (1948-1967)
SHADED AREAS COLDER IN 1975.
2°F = 1.1°C
MEXICO
SOUTH
AMERICA
180°
170°
160°
150°
140°
130°
120°
110°
100°
90°
80°
70°
60°
50°
40°
30°
20°
10°
0°

FIGURE 10



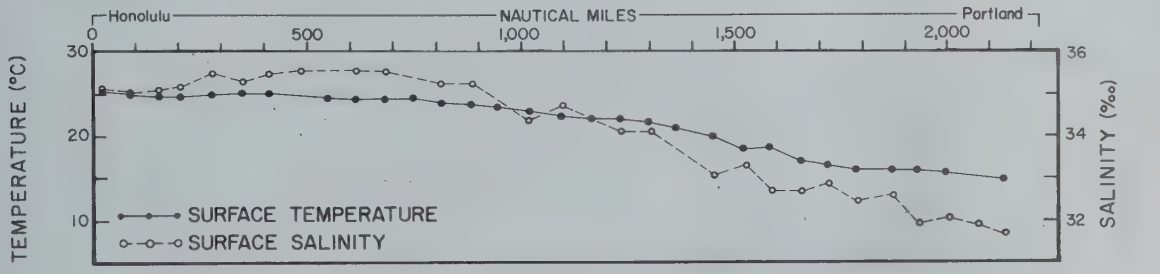


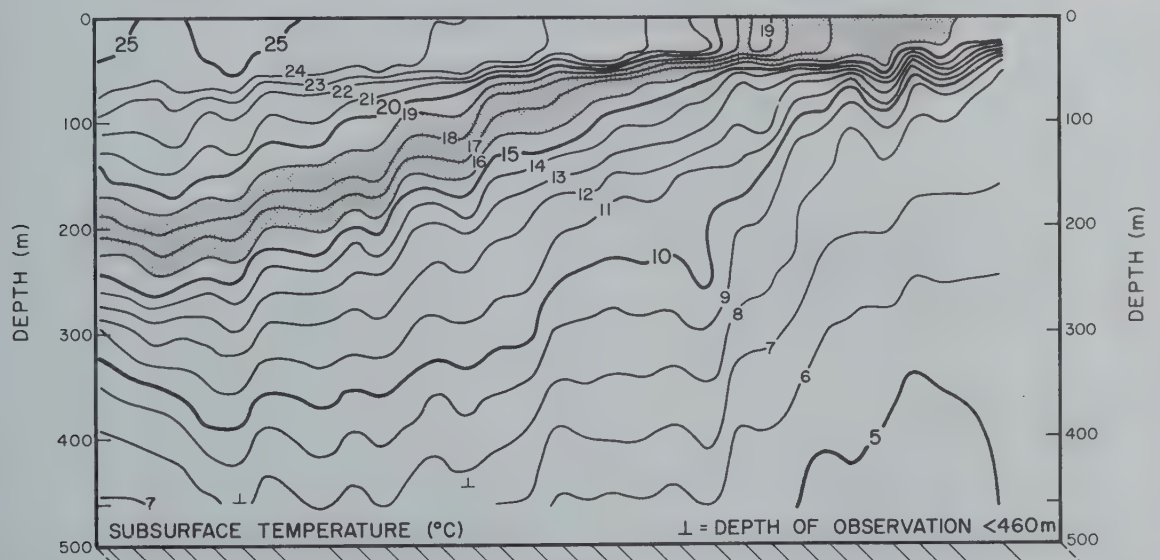
HONOLULU — PORTLAND
(Makapuu Pt. — Columbia River)

SEPTEMBER 9-15, 1975

CALIFORNIAN

VOYAGE 262





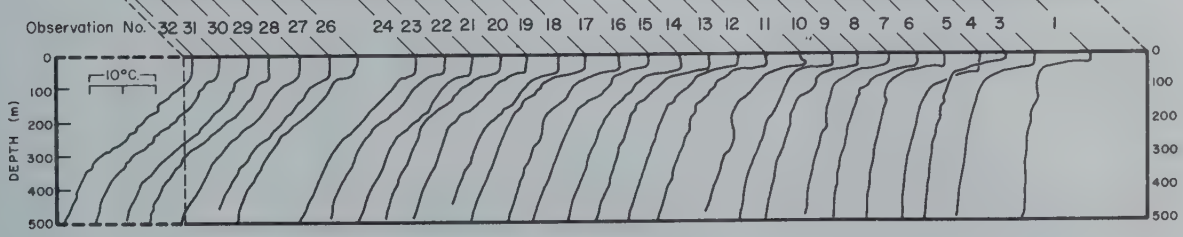
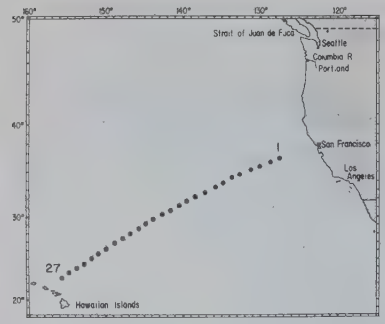
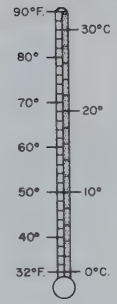


FIGURE 11



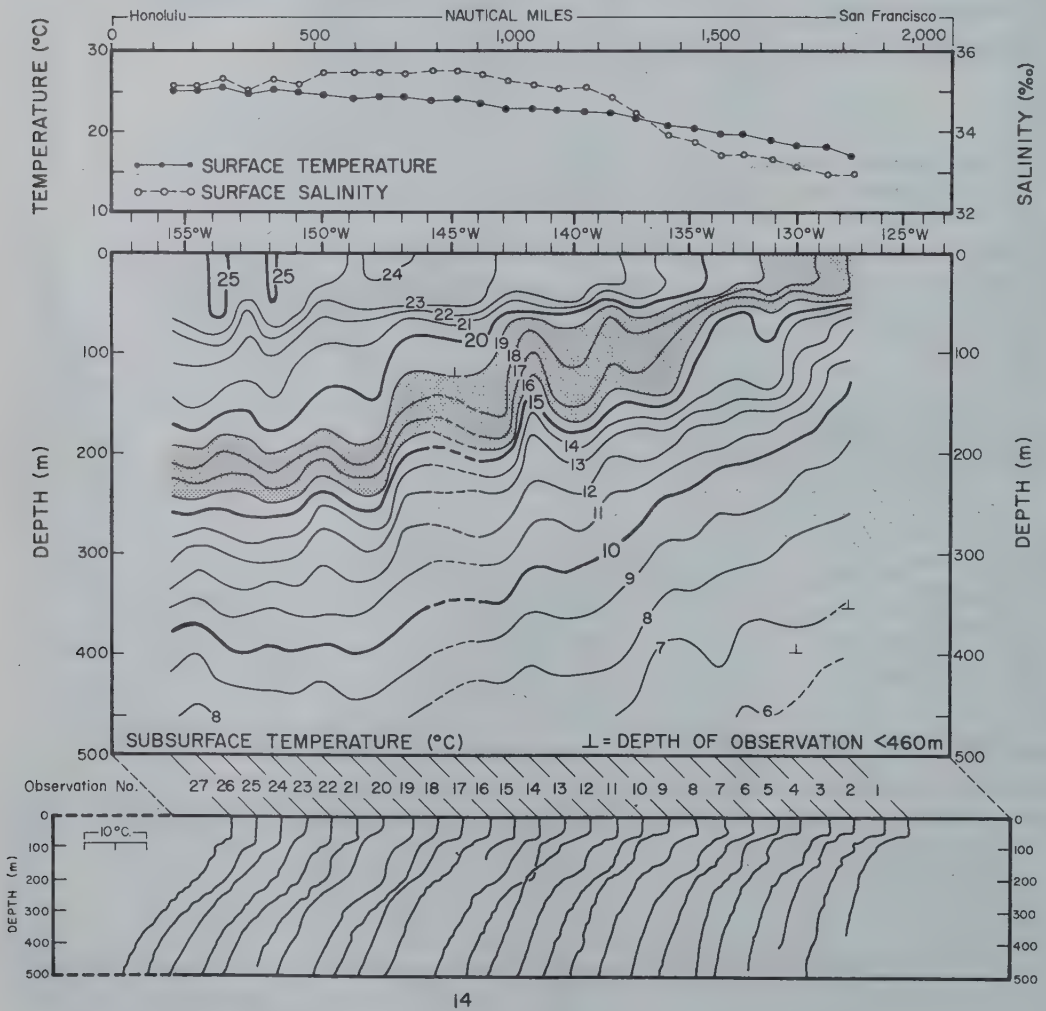


HONOLULU – SAN FRANCISCO

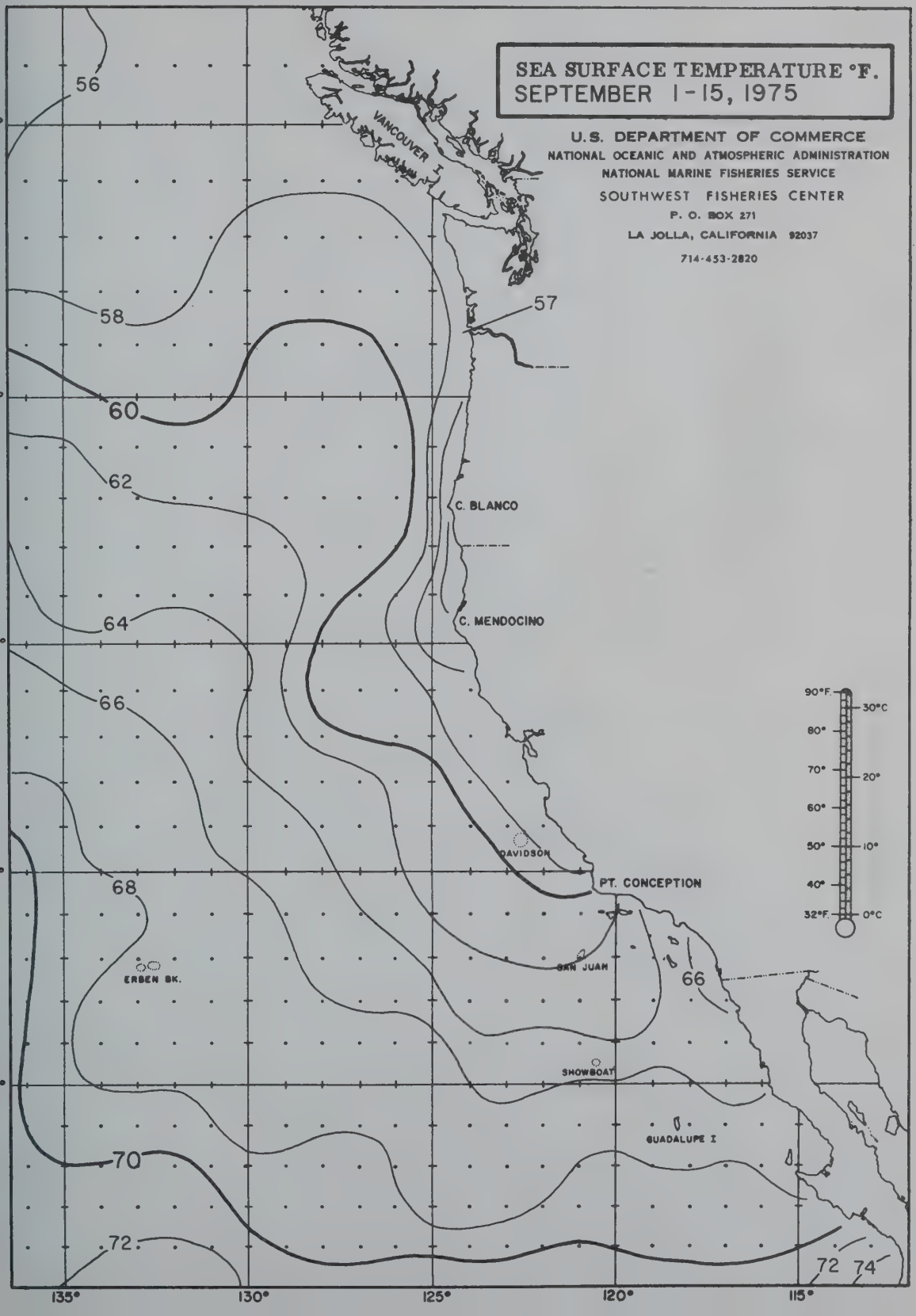
·SEPTEMBER 12–16, 1975

·HAWAIIAN QUEEN

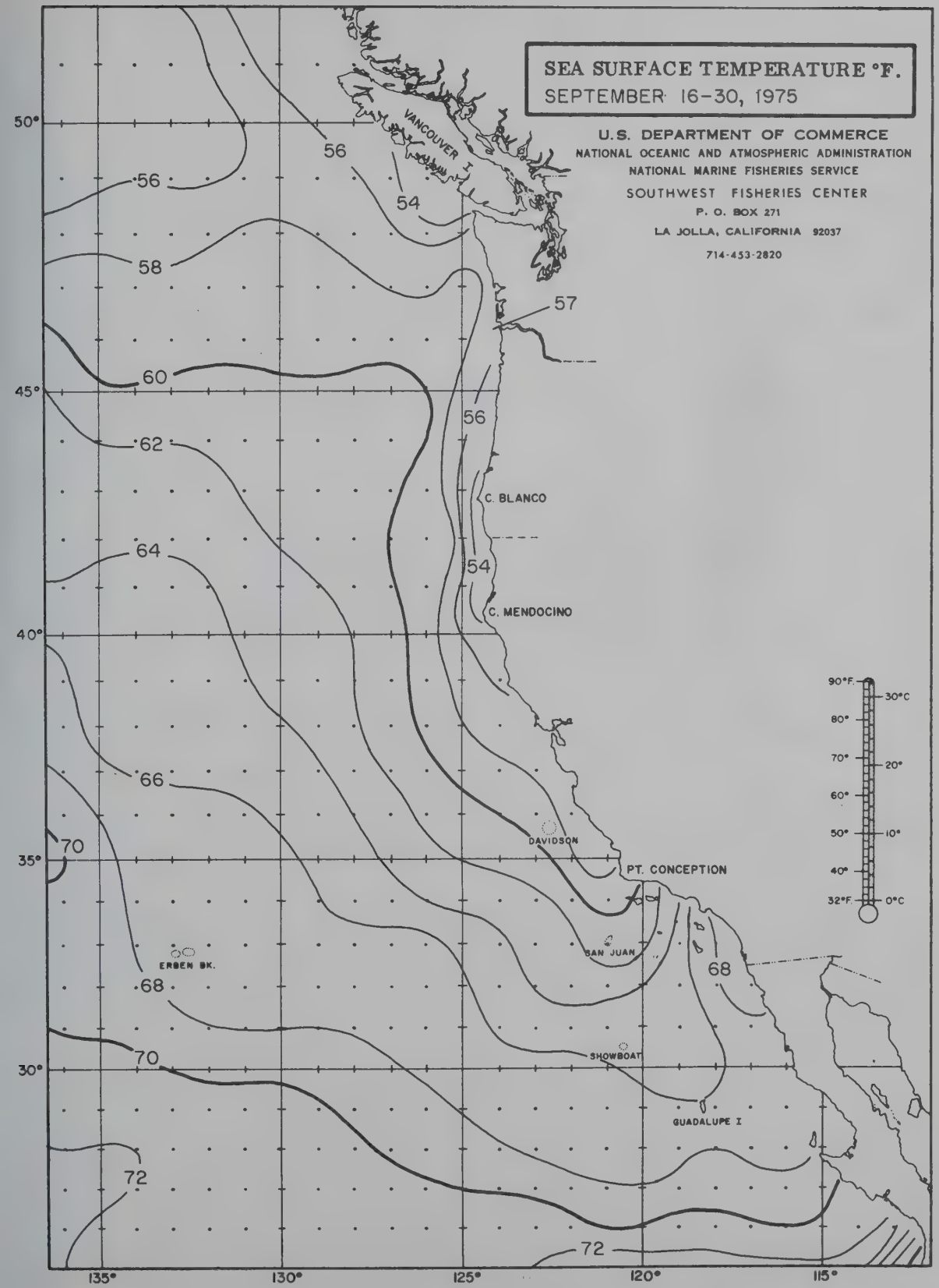
VOYAGE 165



FISHING INFORMATION – supplement



FISHING INFORMATION – supplement



U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
La Jolla, California 92038

BULLETIN No. 75-6

ALBACORE FISHING HAMPERED BY WEATHER CONDITIONS

The most consistent fishing during the last 2 weeks of August remained in the Pacific Northwest as much of the boat fleet worked from Crescent City to Newport and southwest of Cape Cook. Catches of up to 400 fish per day e reported from Coos Bay to Newport and the average daily catches ranged from less than 100 fish per boat to 200 n per boat. Jigboats off Cape Cook, meanwhile, reported spotty fishing and scores up to 200 fish until the fourth k of August when these boats headed south. Some jigboats off central and northern Oregon also moved southward fishing was reported between Cape Blanco and Crescent City. One score of 700 fish was heard off the Rogue River August 23, but top catches were generally 100-300 fish in this area. Mostly rough seas were encountered off thern Oregon which limited the number of boats fishing in this area. Fishing in other locations off the Pacific thwest was also hampered by poor weather.

As more boats moved south during the end of August, some catches of 100-300 fish were reported between the Gorda valley and Point Arena, but rough seas in September have forced boats to leave this area. Albacore were also ng caught off central California when weather permitted fishing. Jigboats 30 miles off Point Sur averaged about fish on August 26 and fish schools were reported scattered from Morro Bay to the Pioneer Seamount. Catches, ever, have been small since August 26.

Baitboats fished mostly off Cape Cook and Westport to Cascade Head where scores were generally 3-6 tons. Rough s also hampered baitboat fishing efforts.

The three American Fishermen's Research Foundation's chartered vessels returned to sea during the third week of ust and scouted for albacore and conducted scientific observations from Point Conception to Cape St. James, Queen rlotte Islands. Individual boat catches of 100-242 fish were reported on August 20-21 in the area 130 miles west Destruction Island to 90 miles west-southwest of Cape Cook; on August 21 from 55 miles west-southwest to 130 miles t of Point Sur; on August 24-27 from 30 miles southwest to 60 miles west-southwest of Point Sur; on August 28 n 65 miles west-southwest to 100 miles west-northwest of Crescent City; and on August 31 to September 1 from 95- miles off Point St. George. Surface water temperatures were between 58-60°F (14.4-15.5°C) and the average fish e was between 7-13 pounds. Smaller catches of 7-78 fish were made almost daily when weather permitted fishing; ever, zero fish days were reported on August 27-29 from 150-250 miles offshore between southern Washington and tral Oregon.

San Diego sportboat catches decreased slightly during the last 2 weeks of August as total daily catches were ween 500-1400 albacore. The average catch per angler, however, remained 1 to 2 fish as these sportboats fished 75 miles south of San Diego on predominantly 12-18 pound fish.

As of August 31, an estimated 12,000 tons of albacore have been landed.

During the second half of August, sea surface temperatures increased by 2-4°F (1.1-2.2°C) in most areas between North American coast and 135°W longitude. Exceptions to this were near shore areas off the Washington, northern gon and southern California coasts where temperatures decreased slightly. Consequently, sea surface temperatures t were 2-4°F (1.1-2.2°C) below normal during the first half of August, edged closer to normal and slightly above mal values in most offshore regions.

According to the Long Range Prediction Group of the National Weather Service, sea level pressures are expected average below normal over the eastern North Pacific and coastal regions of western North America during September. a result, an above normal number of weather fronts are expected to pass over the Pacific Northwest coastal regions sing periods of strong south to southwesterly winds and rough seas from Cape Flattery south to Cape Mendocino and ecrease in the north to northwesterly winds along central California. However, between frontal passages, strong therly winds and rough seas will again occur off the southern Oregon and north and central California coasts.

cember 2, 1975

Staff, Albacore Fisheries Program
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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE
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BULLETIN NO. 75-7

ALBACORE FISHERY MOVING SOUTHWARD, POOR WEATHER CONDITIONS CONTINUED

Rough seas and high winds continued to affect the fishing efforts of jigboats and baitboats from Point Conception to Cape Flattery during much of the first 2 weeks of September. Some jigboats, however, reported good catches 200 to 500 fish on some days from Eureka to Newport, off Point Arena and near the Davidson Seamount. Because of e rough seas, only a few boats fished north of Point Arena for any length of time and most of the jigboat fleet aded south to central California in anticipation of better fishing and better weather conditions. As boats moved ith high scores of 200 to 500 fish per boat per day were reported in the Davidson Seamount area near the end of e second week of September and a good average jigboat catch of 175 fish per boat was reported 100 miles offshore tween Point St. George and Eureka on September 14. Prior to that time, jigboats caught from 100 to 150 fish off ntral California on days when weather conditions permitted fishing. Most of the albacore caught by the jigboats all areas were 10 to 12 pounds. Baitboats, meanwhile, continued to fish mostly from Westport to Coos Bay and eraged 3 to 5 tons on some days and as high as 10 tons a day. Baitboats also reported better weather conditions l better fishing success during the end of the second week of September.

The three American Fishermen's Research Foundation's chartered vessels worked from northern Baja California to e Flattery during the first 2 weeks of September. Catches were poor in the region 50 to 100 miles offshore from e Lookout to Cape Flattery as one boat reported scores of 0 to 55 fish per day prior to entering Astoria on ptember 8. Fishing was better off northern California where scores of 100 fish or better were made on September 2 ut 100 miles west of Crescent City and on September 5, 40 miles off Point Arena. Best fishing for chartered ts, however, was in the area 35 to 60 miles west of the Davidson Seamount to 65 miles west-southwest and 180 es west of Point Conception where catches of 108 to 514 fish per day were recorded from September 9 to 13 by a rtered boat in the area. Most of the albacore caught by these boats were between 6 to 22 pounds off the Oregon l California coasts and 11 to 26 pounds off the Washington coast. The average size was 10 to 11 pounds and 19 to pounds, respectively. The chartered boats off California were also fishing from 40 to 200 miles off the coast.

San Diego sportboats fishing for albacore continued to work 50 to 70 miles south of San Diego on mostly 14 to pound fish. Total daily catches have been between 400 to 1,250 fish and the average catch per passenger has en approximately one to two fish.

Sea surface temperatures increased at below-normal rates over much of the eastern North Pacific during the rst half of September. Consequently temperatures are 1 to 2°F (0.6 to 1.1°C) below normal values in most offshore gions. Strong winds along the Oregon and California coasts caused temperatures to decrease due to upwelling; the st intense cooling occurred between Cape Blanco and Cape Mendocino where temperatures are now at 2 to 4°F (1.1 to °C) below-normal values.

According to the Long Range Prediction Group of the National Weather Service, sea level pressures are expected average above normal off the U. S. west coast from mid-September through mid-October. These conditions should se frequent periods of strong north-northwesterly winds and rough seas along the southern Oregon and California sts. While occasional weather fronts will move inland over the Pacific Northwest, the more intense storm sys- ms are expected to move on a northernly track into eastern Alaska.

ptember 16,1975

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BULLETIN No. 75-8

JIGBOATS IN CALIFORNIA WATERS, MANY BAITBOATS STILL IN PACIFIC NORTHWEST

The most consistent area of jigfishing during the last 2 weeks of September was between Morro Bay and Monterey mostly 11 pound albacore. Top scores were 100-300 fish daily from 40-80 miles offshore; however, averages were nerally 50-100 fish per day per boat. A large fleet was off central California but rough seas prevented many boats om working this area.

Good jigboat catches were also made 100 miles offshore between Crescent City and Eureka from September 15-22, t sloppy seas hampered fishing during much of this period and through the end of September. Albacore in this cation were mostly 7-10 pounds. When catches decreased off northern California, some jigboat and baitboat catches re reported off Baja California from the 295 fathom spot to San Martin Island. On some days scores of 100 fish re reported by jigboats and 300 by baitboats, however, more smaller catches were also made. By the end of ptember, boats were still fishing near the 295 fathom spot on predominantly 13 pound fish.

Most of the baitboats, meanwhile, remained in the Pacific Northwest. Catches of up to 7 tons were reported by ese boats from the Columbia River to Westport, but good fishing areas were getting smaller. Poor weather and ugh seas also hampered the baitboats in this area.

The American Fishermen's Research Foundation's chartered vessels fished from San Francisco to Cape Flattery and int Conception to San Benitos Island during the last 2 weeks of September. Except for the area 60-100 miles south San Diego, fishing was very poor. Rough seas were also a factor off northern California as one boat in this area d not fish for 3 days after leaving port on September 22. Another chartered vessel entered the area off Eureka in te September and reported many small jumping albacore on September 29. The chartered boat that fished from the 5 fathom spot off Baja California to 40 miles south of this spot caught 84-106 fish daily from September 20-22. ese catches brought other commercial boats into the area in late September.

San Diego sportboats continued to make good catches from 50-90 miles south of San Diego on mainly 15-20 pound sh. Albacore counts were 180 to 2421 fish per day with the average catches ranging from less than 1 fish per ssenger to nearly 5 fish per passenger.

As of September 30, an estimated 18,000 tons of albacore have been landed.

Seasonal cooling occurred along most of the Pacific coast during the second half of September with sea surface mperatures dropping 1-2°F (0.6-1.1°C) from values during the first half of the month.

Exceptions to this cooling trend occurred off Washington, between Point Reyes and Point Sur, and offshore southern lifornia and Baja California where surface temperatures rose 1-2°F (0.6-1.1°C). Consequently, coastal temperatures at were below normal in these regions edged closer to normal values during the latter part of the month.

According to the Long Range Prediction Group of the National Weather Service, major storm systems that develop the Gulf of Alaska are expected to follow a northern track into western Canada during October. However, occasional ather fronts will move inland over the Pacific Northwest and northern California causing strong south to south-sterly winds and rough seas. Since fall is a transitional season, wind conditions off Central California will ry with less frequent periods of strong north-northwesterly winds than during the summer months.

ptember 30, 1975

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